Quiz 6

Name: _____

Instructions:

1. **Wait to start until the TA tells you to do so. Do not turn the page yet.**
2. You will have 25 minutes to complete the question.
3. Please turn in this quiz sheet when finished. You may either sit quietly at your desk (no laptops), or, preferably, leave the room and return when the quiz is over for the class.

Problem 1 (out of 100 points)

First, **fill in the blank line and two methods below** for a `Person` class that stores the name and age of a person. The constructor should set these fields to the incoming arguments, as well as update a `count` field by one each time the constructor is called.

Do not modify any of the other existing lines. Your solution must compile against the skeleton code below for credit.

```java
public class Person {
    private String name;
    private int age;
    _____ count;

    public Person(String name, int age) {

        // fill in below




    }

    public String getName(){
        return name;
    }

    public int getAge(){
        return age;
    }

    public int clearAge(){
        this.age = -1;
    }

    public int getCount(){
        return count;
    }

    public String toString(){
        // fill out this method to return the name and the age separated
        // by a space




    }
}
```

Next, **complete the method below** that takes as argument a 2D array of `Person` objects and a string `name`. The method will search through all people in this grid, looking for any that match the name of the incoming argument. Assume this method lives in a file called Driver.java.

Recall you can compare if two Strings are the same in Java with the `equals()` method – use this method.

For every instance such a match is found, the matching `Person` object should have its `age` set to -1 using the `clearAge()` method above.

The method should also return `true` if any matches were found, and `false` otherwise.

```
public _____checkInGrid(Person[][] peopleGrid, String name){
```